

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2, RDT&E Budget Item Justification							DATE: February 2005	
APPROPRIATION/BUDGET ACTIVITY RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-7					R-1 ITEM NOMENCLATURE 0305205N Endurance Unmanned Aerial Vehicles			
COST (\$ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Total PE Cost	95.181	85.799	0.000	29.339	121.388	253.422	242.223	127.397
3061 Global Hawk Maritime Demo Sys	75.375							
4020 BAMS UAV	19.806	85.799	0.000	29.339	121.388	253.422	242.223	127.397

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:
This program provides for the development of High Altitude Endurance (HAE) Unmanned Aerial Vehicle (UAV) Systems for DoD that provide warfighters with the dedicated capability for Broad Area Maritime Surveillance as a standoff persistent, Intelligence, Surveillance and Reconnaissance (ISR) asset. This program includes:

Global Hawk Maritime Demonstration (GHMD) System. The Secretary of the Navy directed procurement of two USAF Global Hawk Aircraft to include the air vehicle and associated support equipment, integration of maritime payloads, SIGINT and communications for demonstration and experimentation purposes. The GHMD System will serve as fleet asset for the development of UAV Concept of Operations (CONOPS), tactics, techniques and procedures and cultural building for Navy High Altitude Endurance (HAE) UAVs. This project was initiated in FY 2003 in PE 0305204N, Tactical Unmanned Aerial Vehicles.

Broad Area Maritime Surveillance (BAMS) UAV has been designated a pre-Major Defense Acquisition Program (MDAP) for the development and fielding of a Long Endurance UAV for the maritime/littoral environment. The BAMS UAV will provide Carrier Strike Group (CSG), Expeditionary Strike Group (ESG) and Joint Forces Maritime Component Commanders (JFMCC) with a persistent maritime Intelligence, Surveillance and Reconnaissance (ISR) capability. BAMS UAV will consist of air vehicles, payloads and ground/surface systems. The BAMS UAV program is structured to meet the need for persistent maritime ISR and to complement other ISR platforms.

R-1 SHOPPING LIST - Item No.

202

UNCLASSIFIED

Exhibit R-2, RD TEN Budget Item Justification
(Exhibit R-2, page 1 of 9)

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							DATE: February 2005	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-7	PROGRAM ELEMENT NUMBER AND NAME 0305205N Endurance Unmanned Aerial Vehicles				PROJECT NUMBER AND NAME 4020 BAMS UAV			
COST (\$ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
4020 BAMS UAV	19.806	85.799		29.339	121.388	253.422	242.223	127.397
RDT&E Articles Qty					2			

A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

The Broad Area Maritime Surveillance (BAMS) UAV has been designated a pre-Major Defense Acquisition Program (MDAP) for the development and fielding of a Long Endurance UAV for the maritime/littoral environment. The BAMS UAV will provide Carrier Strike Group (CSG), Expeditionary Strike Group (ESG) and Joint Forces Maritime Component Commanders (JFMCC) with a persistent maritime Intelligence, Surveillance and Reconnaissance (ISR) capability. BAMS UAV will consist of air vehicles, payloads and ground/surface systems. The BAMS UAV program is structured to meet the need for persistent maritime ISR and to complement other ISR platforms.

The BAMS UAV ORD was signed by the CNO 17 May 2004. Two mission needs statement (MNS) Support the requirement; 1) BAMS and Littoral Armed ISR MNS, and 2) Long Endurance, Reconnaissance, Surveillance and Target Acquisition (RSTA) Capability MNS.

The BAMS UAV will be an evolutionary based acquisition and will use a competitive acquisition strategy. The program will be conducting pre-systems acquisition activities prior to MS B. These activities will consist of documentation development, demonstrations, and study contracts.

FY 2005 funding will be used to forward finance FY 2006 requirements.

R-1 SHOPPING LIST - Item No.

202

Exhibit R-2a, RDTE Project Justification
(Exhibit R-2a, page 2 of 9)

UNCLASSIFIED

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2005																
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-7	PROGRAM ELEMENT NUMBER AND NAME 0305205N Endurance Unmanned Aerial Vehicles	PROJECT NUMBER AND NAME 4020 BAMS UAV																	
B. Accomplishments/Planned Program																			
<table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 30%;"></th><th style="width: 15%;">FY 04</th><th style="width: 15%;">FY 05</th><th style="width: 15%;">FY 06</th><th style="width: 15%;">FY 07</th></tr></thead><tbody><tr><td>Accomplishments/Effort/Subtotal Cost</td><td></td><td style="text-align: center;">47.500</td><td></td><td style="text-align: center;">10.000</td></tr><tr><td>RDT&E Articles Quantity</td><td></td><td></td><td></td><td></td></tr></tbody></table>						FY 04	FY 05	FY 06	FY 07	Accomplishments/Effort/Subtotal Cost		47.500		10.000	RDT&E Articles Quantity				
	FY 04	FY 05	FY 06	FY 07															
Accomplishments/Effort/Subtotal Cost		47.500		10.000															
RDT&E Articles Quantity																			
<div style="border: 1px solid black; padding: 5px; min-height: 60px;">Industry contracts will be used to conduct systems trade studies and obtain UAV air vehicle and sensor performance data. Contracts will be used to support the demonstrations, which could include modifying existing Navy and Fleet UAV air vehicles.</div>																			
<table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 30%;"></th><th style="width: 15%;">FY 04</th><th style="width: 15%;">FY 05</th><th style="width: 15%;">FY 06</th><th style="width: 15%;">FY 07</th></tr></thead><tbody><tr><td>Accomplishments/Effort/Subtotal Cost</td><td style="text-align: center;">15.231</td><td style="text-align: center;">28.523</td><td></td><td style="text-align: center;">13.836</td></tr><tr><td>RDT&E Articles Quantity</td><td></td><td></td><td></td><td></td></tr></tbody></table>						FY 04	FY 05	FY 06	FY 07	Accomplishments/Effort/Subtotal Cost	15.231	28.523		13.836	RDT&E Articles Quantity				
	FY 04	FY 05	FY 06	FY 07															
Accomplishments/Effort/Subtotal Cost	15.231	28.523		13.836															
RDT&E Articles Quantity																			
<div style="border: 1px solid black; padding: 5px; min-height: 100px;">Activities include requirement flow-down and development of functional and detailed systems specifications (including air vehicle and ground station avionics, software and logistics); solicitation activities; development of milestone and acquisition-related documentation; capability refinement and open systems architecture development; metric development and tracking; affordability assessments and cost analyses; test and evaluation planning , demonstrations using surrogate and UAV platforms. Logistics supportability analyses and environmental planning; development of manpower and basing assessments; risk reduction and risk management; system integration and interoperability planning; systems engineering and technology maturity reviews; program protection planning, corrosion prevention planning, anti-tamper provisioning planning, and Joint and International Cooperation.</div>																			
<table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 30%;"></th><th style="width: 15%;">FY 04</th><th style="width: 15%;">FY 05</th><th style="width: 15%;">FY 06</th><th style="width: 15%;">FY 07</th></tr></thead><tbody><tr><td>Accomplishments/Effort/Subtotal Cost</td><td style="text-align: center;">4.575</td><td style="text-align: center;">9.776</td><td></td><td style="text-align: center;">5.503</td></tr><tr><td>RDT&E Articles Quantity</td><td></td><td></td><td></td><td></td></tr></tbody></table>						FY 04	FY 05	FY 06	FY 07	Accomplishments/Effort/Subtotal Cost	4.575	9.776		5.503	RDT&E Articles Quantity				
	FY 04	FY 05	FY 06	FY 07															
Accomplishments/Effort/Subtotal Cost	4.575	9.776		5.503															
RDT&E Articles Quantity																			
<div style="border: 1px solid black; padding: 5px; min-height: 60px;">Contractor Support Services, Program Management Support, and Travel.</div>																			

R-1 SHOPPING LIST - Item No.

202

UNCLASSIFIED

Exhibit R-2a, RDTEN Project Justification
(Exhibit R-2a, page 3 of 9)

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2005	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-7	PROGRAM ELEMENT NUMBER AND NAME 0305205N Endurance Unmanned Aerial Vehicles	PROJECT NUMBER AND NAME 4020 BAMS UAV		

C. PROGRAM CHANGE SUMMARY:

Funding:	FY 04	FY 05	FY 06	FY 07
Previous President's Budget:	24.767	113.438	141.796	146.127
Current BES/President's Budget	19.806	85.799	0.000	29.339
Total Adjustments	-4.961	-27.639	-141.796	-116.788
Summary of Adjustments				
Congressional program reductions		-15.000		
Congressional undistributed reductions		-2.620		
Congressional rescissions				
SBIR/STTR Transfer				
Other		-10.019	-141.796	-117.349
Economic Assumptions	-0.023			0.561
Reprogrammings	-4.938			
Congressional increases				
Subtotal	-4.961	-27.639	-141.796	-116.788

Schedule:

Schedule profile rephased to reflect a new Milestone B in Q4 FY07.

Technical:

Not Applicable

R-1 SHOPPING LIST - Item No. 202

UNCLASSIFIED

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification								DATE: February 2005	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-7			PROGRAM ELEMENT NUMBER AND NAME 0305205N Endurance Unmanned Aerial Vehicles			PROJECT NUMBER AND NAME 4020 BAMS UAV			

D. OTHER PROGRAM FUNDING SUMMARY:

<u>Line Item No. & Name</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>To Complete</u>	<u>Total Cost</u>
APN 044200 BAMS UAV								302.983		
APN Initial Spares: 060510 BAMS UAV								14.289		

E. ACQUISITION STRATEGY:

The BAMS UAV program will develop and field a persistent maritime ISR capability .
 Commercial off-the-shelf (COTS) technology will be utilized to the greatest extent possible for all segments of the BAMS UAV system (i.e., air vehicle, ground segment and payloads).

The BAMS UAV will be an evolutionary based acquisition. Pre-Systems acquisition activities will be conducted prior to a MS B. The program will advance to the System Development and Demonstration (SDD) phase with a Milestone B decision in 4Q FY07. A BAMS UAV AoA was completed in July 2003.

R-1 SHOPPING LIST - Item No. 202

UNCLASSIFIED

UNCLASSIFIED

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 1)								DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
RDT&E, N / BA-7			0305205N Endurance Unmanned Aerial Vehicles			4020 BAMS UAV						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Primary Hardware Development											0.000	
Ancillary Hardware Development											0.000	
Aircraft Integration											0.000	
Ship Integration											0.000	
Ship Suitability											0.000	
Systems Engineering											0.000	
Studies & Analysis	C/FFP	Various		47.500	04/05			10.000	11/06	0.000	57.500	57.500
Licenses											0.000	
Tooling											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal Product Development			0.000	47.500		0.000		10.000		0.000	57.500	
Remarks:												
Development Support/Demo's	Various	Various		5.373	02/05			2.268	11/06		7.641	
Software Development											0.000	
Integrated Logistics Support	Various	Various	2.196	2.928	12/04			1.245	11/06	Continuing	Continuing	
Configuration Management											0.000	
Technical Data											0.000	
Studies & Analyses	Various	Various		5.765	02/05			3.655	11/06	Continuing	Continuing	
GFE											0.000	
Award Fees											0.000	
Subtotal Support			2.196	14.066		0.000		7.168		Continuing	Continuing	
Remarks:.												

R-1 SHOPPING LIST - Item No. 202

UNCLASSIFIED

Exhibit R-3, Project Cost Analysis
(Exhibit R-3, page 6 of 9)

UNCLASSIFIED

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 2)										DATE: February 2005		
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-7				PROGRAM ELEMENT 0305205N Endurance Unmanned Aerial Vehicles			PROJECT NUMBER AND NAME 4020 BAMS UAV					
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation										Continuing	Continuing	
Operational Test & Evaluation										Continuing	Continuing	
Live Fire Test & Evaluation											0.000	
Test Assets											0.000	
Tooling											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal T&E			0.000	0.000		0.000		0.000		Continuing	Continuing	
Remarks:												
Contractor Engineering Support	Various	Various	0.512	0.822	12/04			0.972	11/06	Continuing	Continuing	
Government Engineering Support	WX	Various	12.523	14.457	12/04			6.668	11/06	Continuing	Continuing	
Program Management Support	Various	Various	4.500	8.804	02/05			4.456	11/06	Continuing	Continuing	
Travel			0.075	0.150	10/04			0.075	10/06	Continuing	Continuing	
Transportation											0.000	
SBIR Assessment											0.000	
Subtotal Management			17.610	24.233		0.000		12.171		Continuing	Continuing	
Remarks:												
Total Cost			19.806	85.799		0.000		29.339		Continuing	Continuing	
Remarks:												

R-1 SHOPPING LIST - Item No. 202

UNCLASSIFIED

Exhibit R-3, Project Cost Analysis
(Exhibit R-3, page 7 of 9)

UNCLASSIFIED

Exhibit R-4, Schedule Profile
(Exhibit R-4, page 8 of 9)

R-1 SHOPPING LIST - Item No. 202

UNCLASSIFIED

CLASSIFICATION:

[illegible]

R-1 SHOPPING LIST - Item No. 202

UNCLASSIFIED

Exhibit R-4a, Schedule Detail
(Exhibit R-4a, page 9 of 9)